APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/689,498	10/11/2000	Steven G. LeMay	IGP038	6189

22434   7590   08/23/2002

BEYER WEAVER & THOMAS LLP
P.O. BOX 778
BERKELEY, CA   94704-0778

EXAMINER
MARKS, CHRISTINA M

ART UNIT	PAPER NUMBER
3713	

DATE MAILED: 08/23/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 07-01)

	Application No.	Applicant(s)
Office Action Summary	09/689,498	LEMAY ET AL.
	Examiner	Art Unit	
	C. Marks	3713	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *11 October 2000* .

2a)☐ This action is **FINAL.**   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-52* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *1-10,28,46-52,56 and 58* is/are allowed.

6)☒ Claim(s) *11-27,29-45, 53-55, and 57* is/are rejected.

7)☒ Claim(s) *28,56 and 58* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

    If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

        1.☐ Certified copies of the priority documents have been received.

        2.☐ Certified copies of the priority documents have been received in Application No. _____ .

        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

    a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *2 and 3* .

4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: .

DETAILED ACTION

Specification

The abstract of the disclosure is objected to because of the usage of the self-evident

clause "A disclosed gaming machine." Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999

(AIPA) do not apply to the examination of this application as the application being examined

was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C.

122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment

by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 37-38, 43, and 45 are rejected under 35 U.S.C. 102(e) as being clearly anticipated

by Pascal et al. (US Patent No. 5,971,851. Pascal provides a gaming machine with a controller

(FIG 1, reference 10), a frame buffer (FIG 1, reference 26), a storage device (FIG 1, reference 2)

[RE: Claim 37] which is a hard drive [RE: Claim 38], and a communications interface (FIG 1,

reference 34) [RE: Claim 43], and a display device (FIG 1, reference 28)[RE: Claim 45].

Claims 53, 54, and 57 are rejected under 35 U.S.C. 102(e) as being anticipated by Crawford (US Patent No. 5,997,401).

In regards to claim 53, Crawford provides a slot machine with a symbol save feature which allows a player to save in memory (and retrieve for later use in determining a winning combination) one or more symbols from one or more previous games and use those symbols in a current game to obtain a winning combination (Abstract, lines 3-5). In regards to claim 54, this memory device is located on the gaming machine (FIG 5, reference 54). These symbols are game history information. Crawford also covers the use of video slot machines, thus the capture of these symbols for storage in memory and display on the machine would constitute the usage of a "frame."

Crawford allows the player to continue play of a new game once the symbols have been saved (Column 3, lines 60-61). Thus, in the video slot version this would constitute the generation of a sequence of game presentation frames to be output to the display device to graphically simulate the behavior of a traditional slot machine. In regards to claim 57, Once the new game has completed "spinning," a winning combination of symbols may now be determined by using the currently displayed symbols and the saved symbols from one or more previous games (Column 4, lines 1– 4) thus incorporating the game history data into the data from the current game presentation to create a bonus game scenario.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 11-24 rejected under 35 U.S.C. 103(a) as being unpatentable over Dickinson et al. (US Patent 6,224,485) in view of Alcorn et al. (US Patent No. 6,149,522) in further view of Acres (US Patent No. 6,319,125) in further view of Sandford II et al. (US Patent No. 6,021,196).

In regards to claim 11, Dickinson et al. present a system in which a video game includes a memory and a display coupled to a controller, where data information or history [RE: Claim 12] associated with prior plays are stored or captured in memory. Regarding claim 14, the memory is further defined as a battery-backed RAM (Column 3, lines 12-13). Regarding claim 16, this data, including image data of pictures, can then be displayed in a plurality of available display areas (Abstract). Regarding claim 15, Dickinson et al. further defines the type of video game for which the system may be utilized as virtually any type and/pr size of video game including, for example, coin operated video games (Column 2, lines 60-61) and furthers by including a video card game using a simulated deck of playing cards (Column 4, lines 37-38) thus by definition encompassing video black jack and video poker.

Dickinson et al. incorporate a history frame wherein information is displayed. This screen (FIG 5) includes one sequence of frames used in a game presentation as it incorporates the cards display being played by the player. It is not a requirement that these displayed frames be captured, as they are not a permanent part of the history frame. They are solely a presentation of the game so they may be displayed without actually being captured.

Alcorn et al. teach that in order for a gaming system to be acceptable for casino use, the system must provide both security and authentications (Column 1, lines 42-44). Regarding claim 23, Alcorn et al. further teach that a means to accomplish the security would to provide a program or fixed data set for a casino game, computing a first abbreviated bit string unique to the program or fixed data set, encrypting the first abbreviated bit string to provide an encrypted signature of the fixed data set, and storing the fixed data set and the signature together in a memory device (Column 4, lines 49-54). Regarding claim 13, Alcorn et al. suggest methods to accomplish this encrypting such as a hash function (Column 1, lines 57). Regarding claim 22, Alcorn et al. furthermore discusses the encryption process as used for the signature encryption (Column 3, lines 23-25).

In regards to claim 17, Acres teaches that although the processor could possibly be run exclusively from internal memory, in a preferred embodiment, the processor utilizes a combination of internal and external memory devices to increase the available memory space and to provide more flexibility (Column 21, lines 45-49). In regards to claim 18, the memory is outside of the gaming machine so any storage to this external memory would constitute a transmission to a location outside of the gaming machine.

Regarding claims 20 and 21, Acres et al. teach that it is desirable to increase available memory space in such a gaming device. Two well-known methods in the art for saving the space an image takes are color-reduction and compression. Especially well known, compression algorithms are used everywhere from compressing music files into .mp3s or movies into .mpeg, or reducing the size of files by "zipping" them. It would have been obvious to one skilled in the art to use such a well-known technique to conserve valuable memory space when storing the image data. In US Patent 6,021,196, Sandford II et al. state that color reduction methods analyze a Truecolor image to determine a smaller number of colors that can be used to reproduce an approximation to the original publication quality image. Color reductions to 256 or fewer colors are used commonly for digital images intended for display (Column 1, lines 31-36).

Regarding claim 24, in the manner of the memory management claimed, it is well known in the art that a common algorithm to manage the contents of the memory is the Least Recently Used (LRU). In the LRU algorithm, data is stored in memory in a cache or queue of some type by the time it was last used, being that the oldest data is stored last. When required, the LRU can then remove data from its memory by removing the last item from its cache, thus removing the oldest data when the memory requires it to do so. In order for the LRU to be able to implemented properly, it is axiomatic to the function that it check the memory available before implementing any action on that memory.

It would have been obvious to one skilled in the art at the time of invention to incorporate the security and authentication procedures taught by Alcorn et al. to the basic data presentation of Dickinson et al. to provide a security measure for the presentation to make sure the data was

not being improperly accessed or altered, thus ensuring the security and integrity of the displayed data. Further, it would also have been obvious to one skilled in the art at the time of invention to add an element of external memory to Dickinson et al. in view of Alcorn et al. as taught by Acres in order to increase the storage capacity of the internal memory. Further, to preserve memory even more, color reduction and compression algorithms as taught by Sanford II et al. would be applied to preserve even more space for all of the images being recorded.

Furthermore regarding claim 19, it is well known in the art that anything that is in image or textual format can be printed. Therefore, it would have been obvious to one skilled in the art at the time of invention to print the image format of the game history frame in order to keep a backup record in a permanent paper file of any critical or controversial action, which required the use of accessing such history frame.

Claims 25-27, 29-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dickinson et al. in view of Alcorn et al. (US Patent No. 6,149,522) in further view of Acres (US Patent No. 6,319,125) in further view of Sandford II et al. (US Patent No. 6,021,196).

In regards to claim 25, Dickinson et al. present a system that displays to a device data associated with prior user plays. This game history for is displayed on the screen including one frame corresponding to the actual cards, not currently in play but played during the game. It is axiomatic to the functionality of this system, that for this information to be displayed, it must be stored in a type of database to be accessed.

Regarding claims 26 and 27, it is well known in the art that there exist gaming machines that provide for a variety of games in a single system. These devices allow the player to select which game they desire to play from an array of options. Through Applicant's own admission, it

is known that these devices keep a history, sometimes graphical, of use.   It is well known that a

database can store a large amount of information consisting of different fields of information

with different data types. Therefore, it would have been obvious to one skilled in the art at the

time of invention to create a database that would be large enough to hold over 10 game

presentations, at the same time creating a database to hold this information from a variety of

game environments.

Regarding claims 29 and 30, the display device as shown by Dickinson et al. is connected

to the controller. Though not explicitly said to be either mounted directly to the gaming machine

such as in an arcade machines or physically separate such as in a monitor device on a computer

or television, both are well known means in the art to display information and a re functionally

identical in displaying information.

Alcorn et al. teach that in order for a gaming system to be acceptable for casino use, the

system must provide both security and authentications (Column 1, lines 42-44). Alcorn et al.

use a casino game data set and a unique signature to accomplish this. Further, an authentication

procedure is used to validate the data (Column 9, line 41) and regarding claim 33 this process is

defined as decryption. Even more detailed regarding claim 36, Alcorn et al. state the casino

game data set checking phase proceeds by computing a second abbreviated bit string from the

stored casino game data set using the same hash function, decrypting the stored encrypted

signature to recover the first abbreviated bit string, and comparing the first and second

abbreviated bit strings to determine whether the two strings match. If a match does occur, the

casino game data set is deemed authentic; if there is no match, authentication is denied and

game play is prohibited (Column 4, lines 60–67: Column 5, lines 1-4). Further, it would have

been obvious to produce an error message if authentication is denied.

In regards to claim 31, it is axiomatic to the functionality of Dickinson et al. that a

database is present in order for the system to function correctly. This would encompass also

being able to locate the specific record in the database that is desired for use.

In regards to claim 32, in the display of information by Dickinson et al, player

identification (FIG 4, reference 90), game history information (FIG 4, reference 83), and game

specific information (FIG 4, references 94,96,98) are all shown.

Two well-known methods in the art for saving the space an image takes are color-

reduction and compression. Especially well known, compression algorithms are used

everywhere from compressing music files into .mp3s or movies into .mpeg, or reducing the size

of files by "zipping" them. It would have been obvious to one skilled in the art to use such a

well-known technique to conserve valuable memory space when storing the image data. In US

Patent 6,021,196, Sandford II et al. state that color reduction methods analyze a Truecolor

image to determine a smaller number of colors that can be used to reproduce an approximation

to the original publication quality image. Color reductions to 256 or fewer colors are used

commonly for digital images intended for display (Column 1, lines 31-36).

With that in point, it is axiomatic to the function of these algorithms that a means to undo

them be provided if the original image is to be displayed. Thus, decompression [RE: Claim 34]

and color restoration [RE: Claim 35] would be required.

It would have been obvious to one skilled in the art at the time of invention to incorporate

the validation process as taught by Alcorn et al. to the information display of Dickinson et al. in

order to provide a secure information history where the data can not be corrupted thus creating a

reliable and secure history presentation. Furthermore, it when incorporating space saving

algorithms of color reduction and compression it is known that to bring the images back to their

normal state a reverse on the algorithms is required. It would have been obvious to one skilled in

the art at the time of invention to incorporate these methods in order to further save memory

space in the design of Dickinson et al.

Claims 39-42, and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Pascal et al. (US Patent No. 5,971,851) in view of Williams et al (US Patent No. 6,350,199) in

further view of Dickinson et al (US Patent No. 6,224,485).

The architecture of the gaming machine of Pascal et al. includes a serial (FIG 1, reference

34) and parallel port (FIG 1, reference 36) for connection to peripheral devices. In regards to

claim 44, it would have been obvious to one skilled in the art at the time of invention to attach a

printer to the parallel port, as it is well known in the art as a very common use of a parallel port.

In regards to claim 39 and further along the lines of uses of peripheral devices, Williams et al.

teach of using digitalized facial pictures of a player to be integrated into the gaming environment

to improve player interaction by customization (Abstract, lines 9-13). With the readily available

serial and parallel ports of Pascal et al. and the teaching of Williams et al. about enhancing

player interaction, it would have been obvious to one skilled in the art at the time of invention to

improve on the architecture of the gaming machine as disclose by Pascal et al. to incorporate a

camera into the ports in order to capture a digital image of a player for usage in the gaming

environment. In regards to claim 40, if a camera can easily be incorporated into the hardware

architecture of a device, it would be obvious to use the camera to take pictures of the players. As

stated above, Williams et al. teach that players very much like to see their own pictures in the

gaming environment as it peaks interest and interaction. Therefore it would have been obvious

to one skilled in the art at the time of invention to incorporate this picture not only into the

gaming environment, but also into the gaming history page not only so players can view

themselves in the game but also to identify them on the history page by more than just a name, as

names can often be shared and visual identities seldom are. Regarding claim 41, it also would

have been obvious to incorporate not only the player image but also some information about the

game in order to give the player a comprehensive summary along with the picture. Regarding

claim 42, Pascal et al. disclose that there game machine is designed for use of gaming machines

in which are made available for public usage in exchange for payment, in particularly casinos

(Column 1, lines 12-14), thus obviously including such machines as the video gaming machines

claimed.

Claim 55 rejected under 35 U.S.C. 103(a) as being unpatentable over Crawford (US

Patent No. 5,997,401) in view of Acres (US Patent No. 6,319,125).

Crawford has developed a gaming system in which users can save certain symbols into

memory in order for them to affect the results of a future game. The system includes an internal

memory within the gaming device to accomplish the storage.

Acres teaches that although the processor could possibly be run exclusively from internal

memory, in a preferred embodiment, the processor utilizes a combination of internal and

external memory devices to increase the available memory space and to provide more flexibility

(Column 21, lines 45-49). It would have been obvious to one skilled in the art at the time of

invention to add an element of external memory to Crawford as taught by Acres in order to

increase not only the storage capacity of the internal memory but to create an environment

where it would be possible to network the machines as pertinent data about player outcome

would be stored on a central memory, external to all machines.

Allowable Subject Matter

Claims 1- 10, 28, 46-52, 56, and 58 are allowed.

For the analysis of all claims, the Examiner interprets the usage of the word "frame" and

"capture" as follows:

A frame is a single screen or part of a screen of information that is output to the display

of the gaming machine that contains all graphical and textual data that is presented on the display

of the gaming machine.

Capturing is a process by which all of the graphical and textual data presented in the

frame is obtained from the display (such as by performing a screen capture command (Alt-Print

Screen in windows) and stored in memory or a similar storage means.

Independent claim 1 and those dependent therefrom overcome the prior art of US Patent

No. 6,336,865 in that Applicant generates a sequence of frames to represent a game presentation

and stores each of these frames in a buffer. A frame can then simply be selected from the buffer

if its use is desirable. In '865 software must be used to obtain a frame (Column 4, lines 14-17)

while the game is presently being executed (Column 3, lines 58-59) and a user who is currently

playing the game must request the frame be captured (Column 4, lines 54-59). It is not

automatic and continuous as claimed by Applicant. Furthermore, in '865 the game scene is the

central presentation after it has been obtained. Comment information may be added to the

captured scene. However, in Applicant's claim, the frame is not the central presentation. Data is incorporated from the captured game presentation frame and added to an entirely new history presentation frame and this is the frame that is stored and presented. The initial game scene captured and buffered is not the final product but serves as a data repository for a history frame, which can request information from the captured game scene.

Claim 28 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. It is well known in the art that there are gaming devices that can offer a selection of games in a single machine and store game history information for each of these different games in the same database. However, Applicant claims that for each of the frames stored in the database, a single playback code can be used to access and display them all. This overcomes the prior art of US Patent No. 6,336,865 because of the use of the universal code. In '865 game software for reproducing the game scene of the same game as the game that is executed by the machine is required.

Independent claim 46 and those dependent therefrom overcome the prior art of US Patent No. 6,336,865 in that Applicant allows for a history frame to be accessed and stored in that critical information about the game can be selected from frames from the presentation in order to reconstruct a game history. '865 only allows the user to capture a frame in order to store a screen shot from a current game. It does not provide functionality for selection of scenes based upon critical information or for reconstructing game history.

Independent claim 51 and those dependent therefrom overcome the prior art of US Patent No. 6,336,865 in that Applicant generates a sequence of frame to represent a game presentation

and stores each of these frames in a buffer. A frame can then simply be selected from the buffer if its use is desirable. In '865 software must be used to obtain a frame while the game is presently being executed (Column 3, lines 58-59) and a user who is currently playing the game must request the frame be captured (Column 4, lines 54-59). It is not automatic and continuous as claimed by Applicant.

Claims 56 and 58 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Dependent claims 56 and 58 overcome the prior art of US Patent No. 5,997,401 in that the prior art does not provide a method in which histories from one or more previous games on *different* machines can be retrieved. The Applicant provides a method in which game history frames stored in memory can be retrieved from two separate stations and then combined to create a bonus game scenario. Though '401 does provide a method to use data from previous games to alter the result of a future game, it does not provide a way to incorporate other gaming machines beside the base station in doing so.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

US Patent No. 5,127,651: Slot Machine with History Tracking of User wins

US Patent No. 5,702,303: Game Machines with a Playing Display Screen

US Patent No. 6,357,042: Frame Generation and Frame Capture

Any inquiry concerning this communication or earlier communications from the examiner should be directed to C. Marks whose telephone number is (703)-305-7497. The examiner can normally be reached on Monday - Friday (7:30AM - 4:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, V. Martin-Wallace can be reached on (703)-308-1148. The fax phone numbers for the organization where this application or proceeding is assigned are (703)-872-9302 for regular communications and (703)-872-9303 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)-308-1148.

C. Marks

C. Marks
August 20, 2002

MICHAEL O'NEILL
PRIMARY EXAMINER